

Cytotoxic carbazole alkaloids from *Murraya koenigii* (Rutaceae)

ABSTRACT

Crude extracts and isolated compounds from leaves, stem bark and roots of *Murraya koenigii* including (1) mahanimbine, (2) girinimbine, (3) murrayacine, (4) murrayanine, (5) murrayafoline A. and (6) 3-methylcarbazole were screened for cytotoxic activity against HL-60 cancer cell lines (human T-promyelocytic leukemia), MCF-7 cancer cell lines (human breast cancer), HT-29 cancer cell lines (human colon cancer) and HeLa cancer cell lines (human cervical carcinoma cancer). The cytotoxic potential of the isolated compounds was determined by using MTT (3-[4,5-dimethyl-2-thiazolyl]-2-5-diphenyl-2H-tetrazolium bromide) method. Most of the tested samples showed strong activity against four cancer cell lines with IC₅₀ value less than 30 µg/ml.

Keyword: Carbazole; Rutaceae; *Murraya koenigii*; Cytotoxic